

METHODS AND APPARATUS FOR MICROELECTRONIC DEVICE
MANUFACTURE

ABSTRACT OF THE DISCLOSURE

Aspects of the invention provide various methods and apparatus for delivering more reliable packaged microelectronic components. One embodiment provides a method in which packaged microelectronic components are heated to a reflow temperature of a selected solder before the solder is applied. After the solder is applied, the performance of the packaged microelectronic component can be tested and any packaged microelectronic component that fails to meet minimum performance criteria can be rejected as defective. Such a process may help identify microelectronic components that may pass normal testing procedures, but fail during a subsequent solder reflow operation. One embodiment provides a system that includes a suitable heating apparatus and a solder plating apparatus, with the heating apparatus being adapted to heat and cool packaged microelectronic components before they are delivered to the solder plating apparatus.